WHAT IS CLAIMED IS:

1. A base station apparatus comprising:

a communication unit which communicates with a terminal apparatus at variable transmission rates;

a channel allocation unit which allocates a channel to the terminal apparatus over a predetermined period;

a change planning unit which plans timing for changing a transmission rate for the terminal apparatus in the channel-allocated period; and

a change determination unit which determines whether or not it perform the change of the transmission rate for the terminal apparatus, based on the timing for changing the transmission rate planned by the change planning unit in the channel-allocated period.

2. The base station apparatus according to claim 1, further comprising a link quality derivation unit which derives link quality with respect to the terminal apparatus, wherein

the change determination unit derives a remaining period of the channel for the case of changing the transmission rate, based on a length of the channel-allocated period and the planned timing for changing the transmission rate, and further determines to perform the change of the transmission rate based on the derived link quality depending on the derived remaining period of the channel.

3. The base station apparatus according to claim 2, wherein

for the link quality with respect to the terminal apparatus, the link quality derivation unit measures link quality based on a signal received from the terminal apparatus.

4. The base station apparatus according to claim 2, wherein

for the link quality with respect to the terminal apparatus, the link quality derivation unit detects information on link quality which is included in a signal received from the terminal apparatus.

5. A transmission rate changing method comprising:

making a plan for changing a transmission rate in a period during which a channel is allocated to a terminal apparatus; and

determining whether or not it perform the plan, through calculation using a criterion determined with consideration given to a drop in transmission efficiency resulting from the execution of the plan.

6. A transmission rate changing method comprising:

allocating a channel to a terminal apparatus over a predetermined period;

planning timing for changing a transmission rate for the terminal apparatus in the channel-allocated period; and

determining whether or not to change the transmission rate at the planned timing based on the planned timing in the channel-allocated period.

7. The transmission rate changing method according to claim 6, further comprising deriving link quality with respect to the

terminal apparatus, wherein

in determining whether or not to change the transmission rate at the planned timing based on the planned timing in the channel-allocated period, the remaining period of the channel for the case of changing the transmission rate is derived from a length of the channel-allocated period and the planned timing for changing the transmission rate in planning timing for changing a transmission rate, and

whether or not to perform the change of the transmission rate based on the derived link quality is determined depending on the derived remaining period of the channel.

8. The transmission rate changing method according to claim 7, wherein

in deriving the link quality with respect to the terminal apparatus, link quality based on a signal received from the terminal apparatus is measured as the link quality with respect to the terminal apparatus.

9. The transmission rate changing method according to claim 7, wherein

in deriving the link quality with respect to the terminal apparatus, information on link quality included in a signal received from the terminal apparatus is detected as the link quality with respect to the terminal apparatus.

10. A program which makes a computer execute:

allocating a channel to a terminal apparatus via a wireless

network over a predetermined period;

planning timing for changing a transmission rate for the terminal apparatus in the channel-allocated period; and

determining whether or not to change the transmission rate at the planned timing based on the planned timing in the channel-allocated period.

11. The program according to claim 10, which further makes a computer execute: deriving link quality with respect to the terminal apparatus via the wireless network, wherein

in determining whether or not to change the transmission rate at the planned timing based on the planned timing in the channel-allocated period, the remaining period of the channel for the case of changing the transmission rate is derived from a length of the channel-allocated period and the planned timing for changing the transmission rate in planning timing for changing a transmission rate, and

whether or not to perform the change of the transmission rate based on the derived link quality is determined depending on the derived remaining period of the channel.

12. The program according to claim 11, wherein

in deriving the link quality with respect to the terminal apparatus via the wireless network, link quality based on a signal received from the terminal apparatus via the wireless network is measured as the link quality with respect to the terminal apparatus.

13. The program according to claim 11, wherein

in deriving the link quality with respect to the terminal apparatus via the wireless network, information on link quality included in a signal received from the terminal apparatus via the wireless network is detected as the link quality with respect to the terminal apparatus.